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[3] P. Allen, in: Proc. on Gas Cooled Reactors Today (BNES, London, 1982) p. 65.
[4] J.E. Dendy, Jr., B. Swartz and B. Wendroff, in: Topics in Numerical Analysis, Vol. III, Ed. J.J.H. Miller (Academic Press, London, 1977) p. 447.
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by **B. Cheynet,** *Thermodata, Saint Martin d'Heres, France*

(Physical Sciences Data, 38A & B)

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